

Title (en)

AN ENERGY STORAGE DEVICE MONITORING TECHNIQUE

Title (de)

ENERGIESPEICHERVORRICHTUNGSÜBERWACHUNGSTECHNIK

Title (fr)

TECHNIQUE DE SURVEILLANCE DE DISPOSITIF DE STOCKAGE D'ÉNERGIE

Publication

EP 3433628 A1 20190130 (EN)

Application

EP 17714551 A 20170324

Priority

- GB 201605060 A 20160324
- GB 2017050850 W 20170324

Abstract (en)

[origin: WO2017163089A1] There is provided a method and system for monitoring the condition of one or more cells within an electrochemical energy storage device. The electrochemical device is operated at a current comprising a predefined time-varying component for a first period of time. Voltage across and a measure of heat generation for each of the plurality of cells is sensed during the first time period. An estimate is then calculated of the open circuit potential of the electrochemical storage device from the predefined time varying component of the current and the sensed voltage during the first time period. Then, for each cell, a function can be calculated which relates a ratio of the time derivatives of the sensed measure of heat generation and voltage to the open circuit potential. From this, a measure of the state of health for each cell can be determined.

IPC 8 full level

G01R 31/36 (2019.01)

CPC (source: EP US)

G01R 31/367 (2018.12 - EP US); **G01R 31/374** (2018.12 - US); **G01R 31/396** (2018.12 - EP US); **H01M 10/4285** (2013.01 - US); **H01M 10/48** (2013.01 - EP US); **Y02E 60/10** (2013.01 - EP)

Citation (search report)

See references of WO 2017163089A1

Cited by

EP3983814A4

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2017163089 A1 20170928; CN 109154636 A 20190104; EP 3433628 A1 20190130; EP 3433628 B1 20200122; GB 201605060 D0 20160511; US 2020292622 A1 20200917

DOCDB simple family (application)

GB 2017050850 W 20170324; CN 201780030944 A 20170324; EP 17714551 A 20170324; GB 201605060 A 20160324; US 201716088016 A 20170324